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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,581	07/15/2003	Ekambaram Balaji	030773/2868P	8889

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EXAMINER	
PRICE, NATHAN E	

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/620,581	BALAJI ET AL.	
	Examiner	Art Unit	
	Nathan Price	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 July 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 July 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 30 are pending.

Claim Objections

2. Claims 1 – 30 are objected to because of the following informalities: based on lines 10 and 11 of claims 1 and 13, respectively, it is believed Applicant intended to state "XML format" in lines 7 and 8 of these claims. Claims 6, 18 and 27 state "the first and second methods." It is believed Applicant intended to state "the first and second sets of methods." Claim 25 states, "document type document (DTD)" in line 12. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2 – 12, 14 – 24 and 26 – 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 2, 14 and 26 recite "standard Web services." Claims 8 and 20 recite, "standardized API." The scope of the claim is unclear because it is not clear what is referred to by "standard Web services" and "standardized API."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 – 3, 6, 10, 13 – 15, 18 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Sharma et al. (US 2003/0204645 A1; hereinafter Sharma).

As to claims 1 – 3, 6 and 10 Sharma teaches:

[Claim 1] a method for providing data integration and exchange between a plurality of client applications over a network, wherein each of the client applications access a respective data source, and wherein the data sources of each of the client applications may be stored in different formats and not directly accessible by the other client applications [¶ 5, 8, 10, 37], the method comprising the steps of:

(a) providing an adapter API that provides a first set of methods for the client applications to use to translate data into XML [Fig. 5; ¶ 127]; and

(b) modifying each of the client applications to invoke the methods in the adapter API to convert data into the respective data sources into XML format and to

have the XML formatted data imported into a database on a server, thereby standardizing the data from the data sources [¶ 115, 127];

[Claim 2] (c) including a second set of methods in the adapter API for the client applications to use that export data from the database into the client applications using standard Web services [¶ 5, 115, 127];

[Claim 3] registering the respective data sources with a schema registry in order to create a schema definition and a DTD [¶ 7, 72, 91, 130],

wherein:

[Claim 6] the adapter API includes an XML API comprising the first and second set of methods, wherein the first set of methods comprises a Writer API and the second set comprises a Reader API [¶ 5, 115, 155, 173], and

[Claim 10] the adapter API is published using WSDL [¶ 91].

As to claims 13 – 15, 18 and 22, see the rejections of claims 1 – 3, 6 and 10.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma. Sharma teaches that the adapter further includes a standardized API

comprising SOAP and HTTP libraries [¶ 36, 42]. Sharma fails to specifically teach TCP/IP. However, Sharma does disclose the Internet as a network for connecting the client and server [¶ 35]. Therefore, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to also include a TCP/IP library.

6. Claims 4, 9, 16, 21 and 25 – 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma as applied to claims 3, 8, 15 and 20 above, and further in view of Fry (US 6,880,125 B2).

As to claims 4 and 9, Sharma fails to specifically teach validation and verification. However, Fry teaches wherein:

[Claim 4] step (b) further includes the step of using a respective DTD to validate the XML formatted data generated from the corresponding data source prior to importing the XML formatted data into the database [col. 2 lines 61 – 65; col. 3 lines 60 – 64], and

[Claim 9] the adapter further includes verification code that verifies the generated XML data against the DTD defined in the schema registry [col. 2 lines 61 – 65; col. 3 lines 60 – 64].

It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these references because Sharma teaches that a streaming parser can be used [¶ 123] and Fry provides further information on parsers, including streaming parsers [col. 3 lines 60 – 64]. As to claims 16 and 21, see the rejections of claims 4 and 9.

As to claim 25, see the rejections of claims 1, 3, 9 and 10.

As to claims 26 and 27, see the rejections of claims 2 and 6.

As to claim 28, Sharma teaches that the server further includes a schema generator for generating the schema definition, a DTD generator for generating the DTD, and an adapter software kit that is downloaded from the server and used to incorporate the adapter API into the client applications [¶ 7, 27, 72, 109].

7. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma as applied to claims 3 and 15 above, and further in view of Glass (Glass, Graham, "Web Services Building Blocks for Distributed Systems.") and Umar (Umar, Amjad, "Object-Oriented Client/Server Internet Environments."). Sharma teaches registering the data sources with the schema registry and entering information regarding the schema [¶ 91, 127], but fails to specifically teach accomplishing this with a web browser. However, in order for the mapping information to be available for other clients to use [¶ 91], one of ordinary skill in the art would look for a way to enter the mapping information in the WSDL document. Glass discloses a user defining a mapping by editing information on a server [pages 98 – 100]. Since both Sharma and Glass describe web services being used over the Internet, it would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to find a way to make the changes over a network. Umar discloses that web browsers can be used for FTP upload to make these changes [page 168 ¶ 5]. It would It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to

combine these references because Sharma discloses creating mappings for data types in web services using the Internet, Glass provides more detail regarding how to define a mapping and Umar provides information on how to make the changes when the system is distributed over the Internet.

8. Claims 7, 11, 12, 19, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma as applied to claims 6 and 18 above, and further in view of Chiang et al. (US 6,948,174 B2; hereinafter Chiang).

As to claims 7 and 19, Sharma teaches that the client applications are modified with generator logic that makes calls to methods comprising the adapter API, wherein once called, the Writer API converts data into XML format in memory and transports the data to the server [¶ 115, 155, 173]. Sharma fails to specifically disclose saving the XML format data in an XML file. However, Chiang teaches saving the XML format data in an XML file [col. 8 lines 2 – 16; col. 11 lines 18 – 46]. It would have been obvious to one of ordinary skill in the art at the time Applicant's invention was made to combine these references because both disclose converting data to XML in order to provide compatibility between different systems.

As to claims 11 and 23, Sharma teaches that the server includes an import repository for receiving the XML files generated by the client applications [¶ 115, 173].

As to claims 12 and 24, Sharma teaches that the server includes an XML loader that parses each of the XML files in the import repository and stores name/value pairs in

the database according to a data hierarchy of the corresponding data source [¶ 55 – 56, 173].

9. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma in view of Fry as applied to claim 28 above, and further in view of Chiang. As to claims 29 and 30, see the rejections of claims 11 and 12. See the rejections of claims 7 and 19 for motivation to combine.

Conclusion

10. The prior art made of record on the P.T.O. 892 that has not been relied upon is considered pertinent to applicant's disclosure. Careful consideration of the cited art is required prior to responding to this Office Action, see 37 C.F.R. 1.111(c).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Price whose telephone number is (571) 272-4196. The examiner can normally be reached on 7:30am - 4:00pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NP

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SUPERVISORY PATENT EXAMINER